

Evaluation of serum zinc, copper and magnesium Serum level in the patients with chronic sinusitis and control group

Abstract

Introduction

The chronic sinusitis is one of problems on the medical field which Its Eradication and treatment is difficult. Antioxidant vitamins and ingredients such as zinc, copper and magnesium play a vital role in inflammatory disease like as chronic sinusitis which it's studied in some researches and considered their role.

Methodology

This study is kind of control - case and include 50 people (25 patient and 25 healthy). Samples blood were collected as Fasting and centrifuged which after separating of samples serum, the zinc, copper and magnesium Serum level in the patients with chronic sinusitis and control group measured and then compared.

Results

In this study was considered 25 person with chronic sinusitis and 25 persons as a control group, both groups Were matched in terms of age and gender which age average was $29/28 \pm 4/91$ in case group and age average in control group was $27/36 \pm 3/12$ with 56% man and 44 % woman. Data analyzing showed that the zinc serum level mean was $92/56 \pm 14/08$ in case group and was $95/16 \pm 19/84$ in the control group ($P=0/596$), copper serum level mean was $87/70 \pm 16/79$ in case group and was $93/32 \pm 15/83$ in control group ($P=0/238$), and also the magnesium serum level mean was $1/93 \pm 0/26$ in case group and was $2/10 \pm 0/14$ in control group ($P=0/006$).

Conclusion

Results showed that the zinc, copper and magnesium Serum level is a normal zone in most people of case group. There is no significant difference in relate to the zinc and copper Serum level in people with chronic sinusitis and control group but magnesium Serum level had significant difference statistically which it is contrary to most similar studies.

Key words: Chronic sinusitis, zinc, copper, magnesium.